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From the desk of: Lennie Boteilho

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By: Certified Mail 70000600002226966859

December 11, 2000

Mr. Dennis Frederick, P. E.
Division of Water Quality
Utah Department Environmental Quality
288 North 1450 West
Salt Lake City, UT 84114-4870

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**DIVISION OF
OIL, GAS AND MINING**

**Subject: BARRICK RESOURCES (USA), INC. - FINAL PERMANENT CLOSURE
ACTIVITIES SCHEDULED FOR MERCUR RECLAMATION PROJECT VALLEY
FILL LEACH AREA 2**

Dear Mr. Frederick:

As requested during our meeting of October 31, 2000 Barrick is providing plans and a schedule for final permanent decommissioning of Valley Fill Leach Area No. 2. (VFL2) located at the Barrick Mercur Reclamation Project. This facility is subject to the conditions of the March 12, 1999 Stipulation and Consent Order GW90-03A and May 30, 1995 Closure Approval and incorporated by reference into UGW450002 in August 2000. Barrick concluded the 5-year post-closure monitoring period in September 2000 and subsequently completed the model comparison study for the VFL2 leakage collection system in accordance with the UDWQ May 30, 1995 closure approval. Results of model comparison with real time monitoring data indicated that the engineered soil cover is performing within the expected range of the 1995 model analysis. Under the long-term model-predicted infiltration rate from VFL2, flow rates diminish with time and concentrations of inorganic constituents decline rapidly with distance. VFL2 impacts to ground water quality for nearly all modeled cases were shown to be negligible at a distance equal to the location of well MW-9. The model comparison report, dated December 1, 2000 is provided as an attachment.

Physical reclamation of VFL2 is nearly complete, and revegetation of the cover is successful. To complete permanent final closure of the facility, Barrick proposes and requests authorization to conduct the following actions:

Cistern Pump System

Pump down the cistern water level to the lowest level possible and remove the pump and pumping equipment. Construct a bulkhead approximately 15 feet into the cistern concrete access pipe from the ground surface level, backfill with native soil materials and reclaim the final surface area. The leakage collection piping system will be cement grouted. Grouting will be

conducted by pumping with a mechanical packer and stemming pipe a neat cement grout, as far as possible, up gradient into the leakage collection pipe. Following completion of grouting, the leakage collection access manhole will be evacuated and abandoned, backfilled with native soil materials and final surface area reclaimed.

The following action was discussed in a meeting with the Utah Division of Water Quality on October 31, 2000. Post-Closure monitoring and data evaluation indicated that the in-situ liner system would continue to collect infiltrated meteoric water unless breached. To satisfy a UDWQ concern to achieve a non-impounding structure, Barrick proposes the installation of borings to provide long-term gravity drainage capability of VFL2 as part of the final permanent closure. The borings will provide a means to direct residual waters into the bedrock zone, monitor for the presence of water retention on the liner and create a non-impounding facility. The following action is requested:

Boring of Liner System

Complete the installation of at least 2 or possibly 3 vertical borings through the soil cover, spent ore, VFL2 liner, base fill, and into bedrock. Each installation will be constructed with casing, a screen and appropriately located typical well seals. The borings will be constructed directly after the cistern has been pumped to its lowest water level.

Summary of Boring Program

As-built drawings from VFL2 will be used to locate the borings and provide the location of the deepest portion of the facility. These locations will be confirmed by survey prior to initiation of drilling. The borings will be advanced through approximately 180 feet of loosely consolidated to unconsolidated spent ore material. Borings will be drilled using a system capable of advancing and retracting temporary steel casing through the unconsolidated soil cover, spent ore materials, liner system and any foundation fill to access the bedrock zone. Anticipated total-boring depths will be about 215 feet, ending in the underlying bedrock materials that include dark gray shaley limestone and fractured limestone units. A short-term constant head test will be conducted in at least one of the borings to provide estimates of hydraulic conductivity in the bedrock prior to boring completion, and to quantify the volume of water that can be infiltrated into the underlying bedrock zone. This information will help determine the number of borings required. The boring installations will be constructed using 4-inch Schedule 40 PVC materials. Locations of the proposed borings are shown on Figure 1. Design of the borings is shown on Figure 2 and will be similar to installations previously constructed in Valley Fill Leach Area 1 during 1998.

Monitoring Program


Well MW-9 will remain in service and be monitored and reported in accordance with the terms of the Consent Order and for the duration of the current Ground Water Permit UGW450002. Well MW-9 water quality is Class 1, and no impacts have been observed throughout the previous historical monitoring period. Modeling indicates that infiltration from VFL2 should not result in impacts to well MW-9 water quality.

Scheduling

Assuming authorization is granted for our request, Barrick is scheduling to complete the above requested fieldwork in January or February 2001. Barrick feels winter conditions will minimize impacts from the drilling operations to the soil cover system.

If you have any questions or concerns on this matter please contact me at 801-741-4668.

Respectfully,



Leonard Boteilho
Project Manager, Barrick Resources (USA) Inc.

Attachments: Figures 1 and 2, and Document titled "Valley Fill Leach Area 2 Leakage Collection Monitoring Evaluation and Comparison with Infiltration Modeling for Barrick Resources (USA), Inc. Mercur Mine"

cc: Don A. Ostler (UDWQ) w/o attachments
Keith Eagan (UDWQ)
Glenn M. Eurick (Barrick)
J. Brown (GET)
Tooele County Health Department (w/o attachments)
Utah County Health Department (w/o attachments)
Mary Ann Wright (UDOGM) (w/o attachments)